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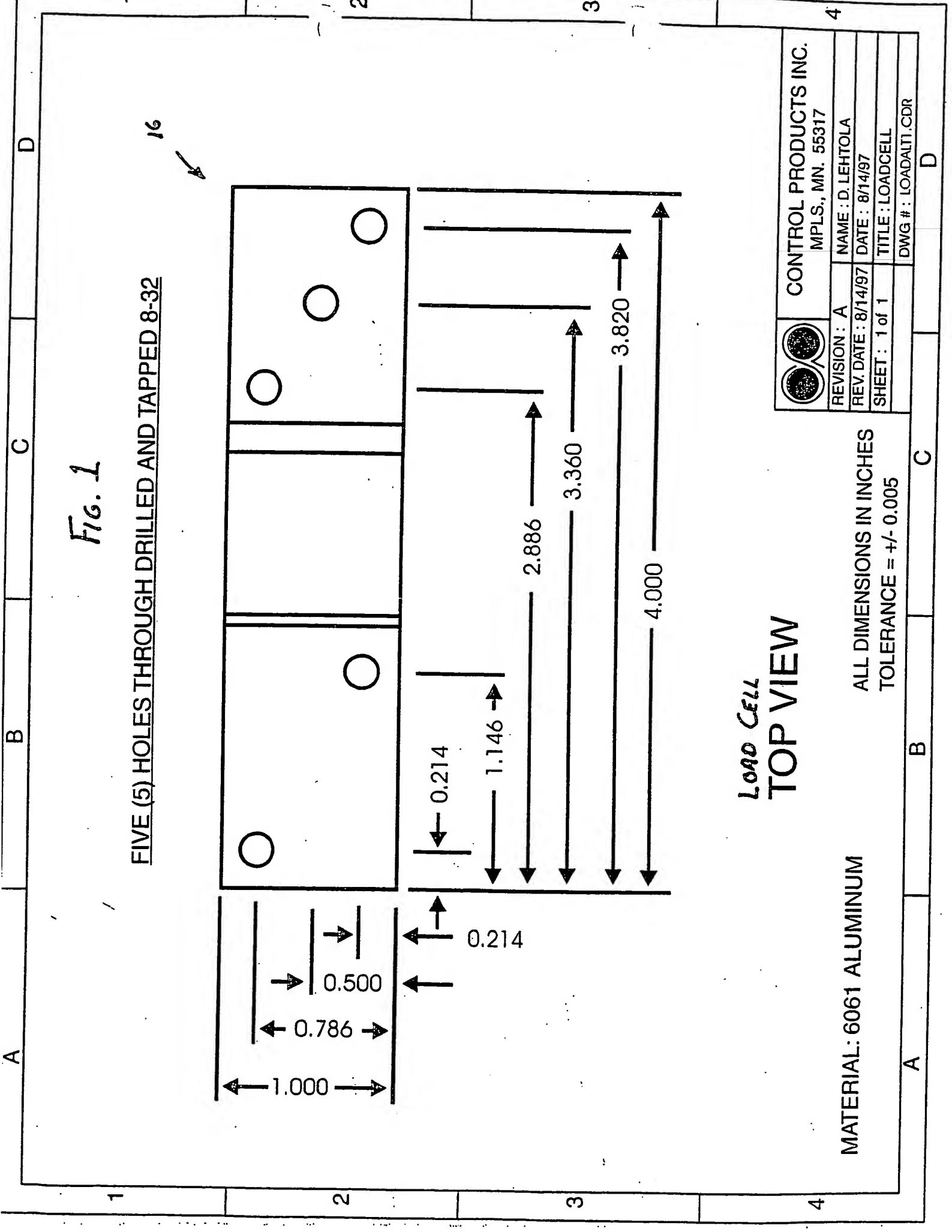
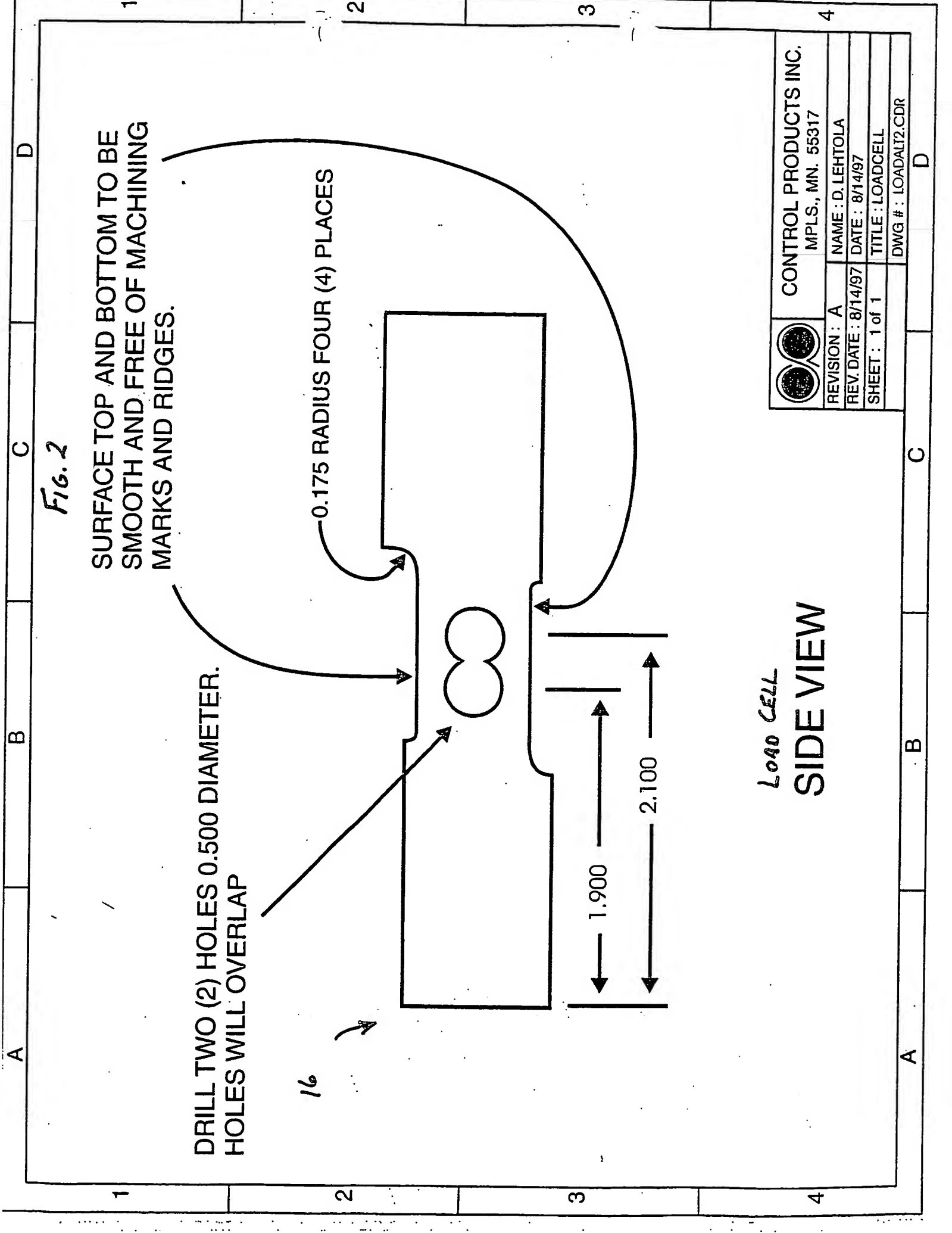


FIG. 1

FIVE (5) HOLES THROUGH DRILLED AND TAPPED 8-32

LOAD CELL  
TOP VIEW



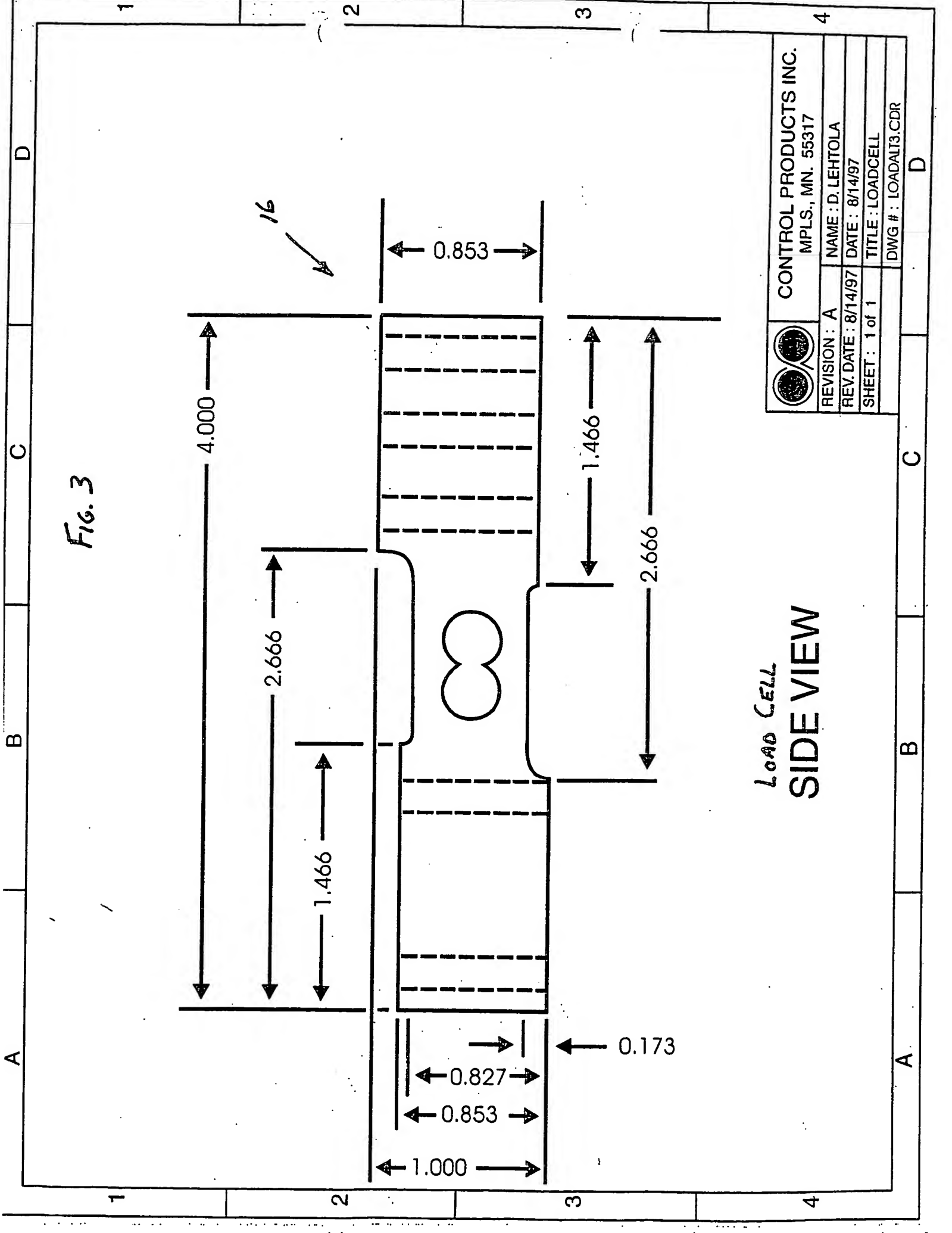



FIG. 3

LOAD CELL  
SIDE VIEW

	CONTROL PRODUCTS INC. MPLS., MN. 55317			4
	REVISION : A	NAME : D. LEHTOLA	DATE : 8/14/97	
	REV. DATE : 8/14/97	TITLE : LOADCELL		
	SHEET : 1 of 1	DWG # : LOADAL13.CDR		

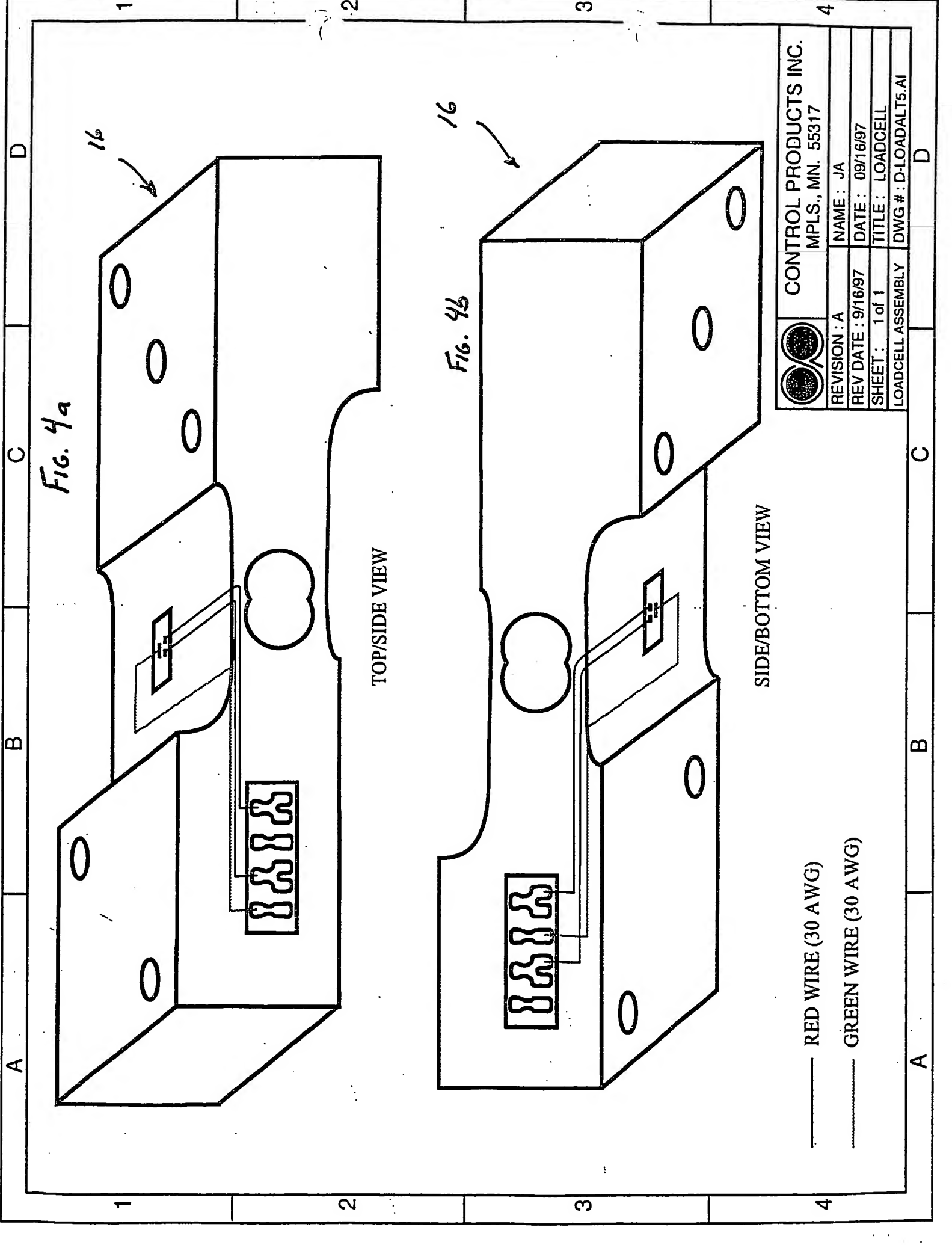


Fig. 4a

TOP/SIDE VIEW

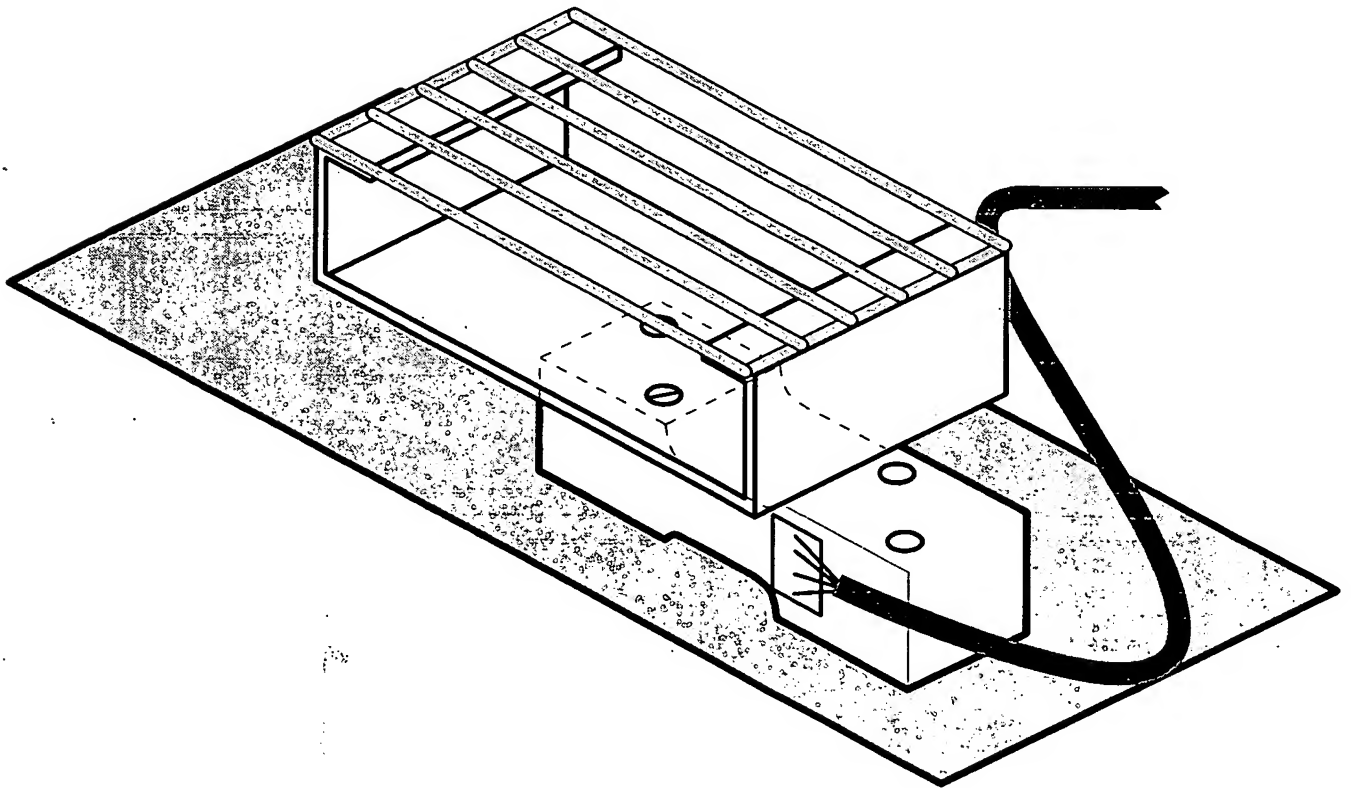
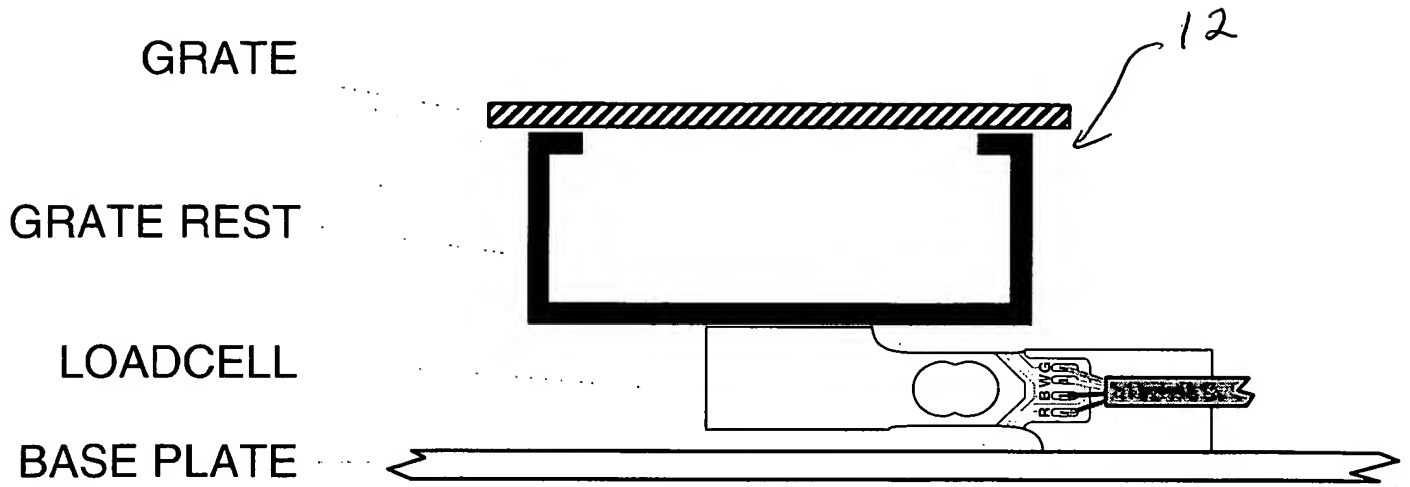
Fig. 4b

SIDE/BOTTOM VIEW

- RED WIRE (30 AWG)
- GREEN WIRE (30 AWG)

	CONTROL PRODUCTS INC.	
	MPLS., MN. 55317	
	REVISION : A	NAME : JA
	REV DATE : 9/16/97	DATE : 09/16/97
	SHEET : 1 of 1	TITLE : LOADCELL
LOADCELL ASSEMBLY		DWG # : D-LOADLT5.AI

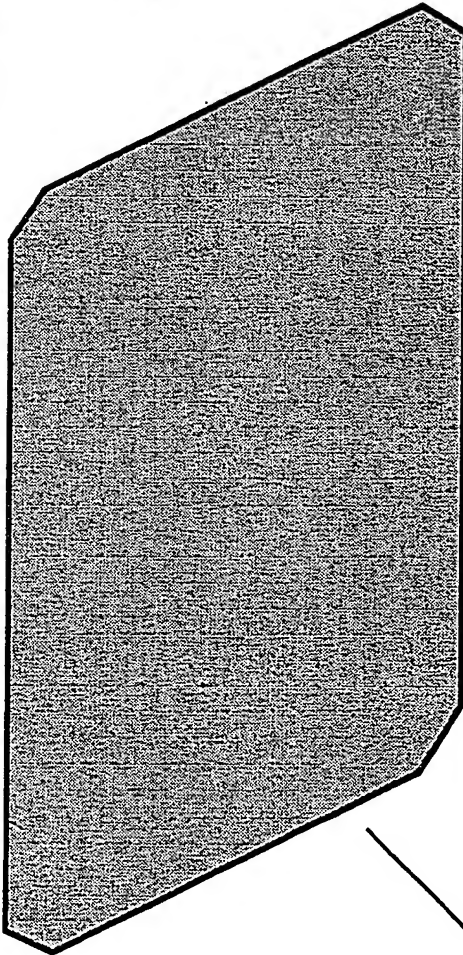
FIG. 5a



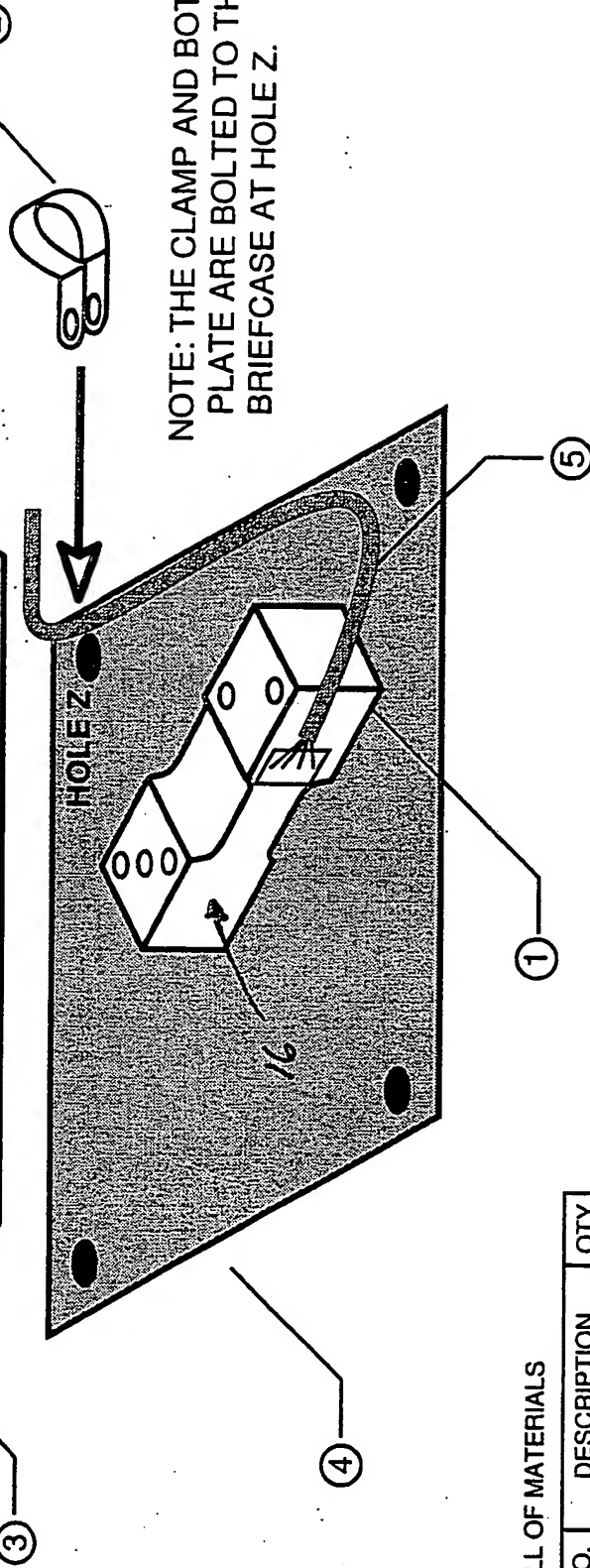
RECORD OF REVISIONS

DATE	DESCRIPTION	REV
04/14/98	RE-ROUTE CABLE ASSY	A
05/05/98	CHANGE CABLE ASSY, REMOVE HEATSHRINK	B
06/11/99	REDESIGN OF UPPER PLATE	C

Fig. 5b



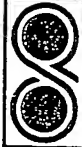
PRODUCTION  
PROTOTYPE



BILL OF MATERIALS

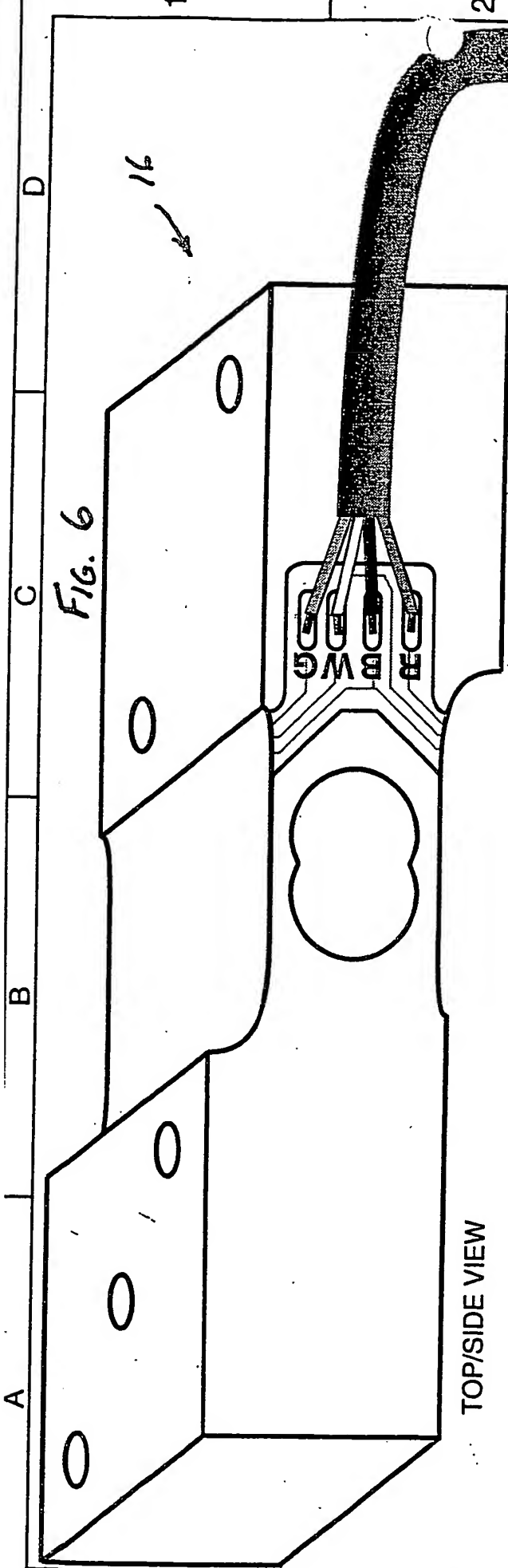
ITEM	PART NO.	DESCRIPTION	QTY
1	34120001	LOADCELL STRAIN GAUGE ASSEMBLY	1
2	34860000	CLAMP, STRAIN RELIEF KEYSTONE 7623	1
3	34520000	PLATE, SCALE, TOP REFRIGERATION	1
4	34530000	PLATE, SCALE, BOTTOM REFRIGERATION	1
5	36530001	CABLE ASSY, 4COND, 24AWG, UL2464, GRAY	1

NOTE: REFER TO DRAWING  
D-34120002, SHEET#2 FOR  
LOADCELL AND CABLE ASSEMBLY.

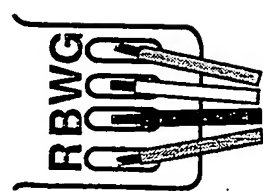


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Minneapolis, MN. 55317

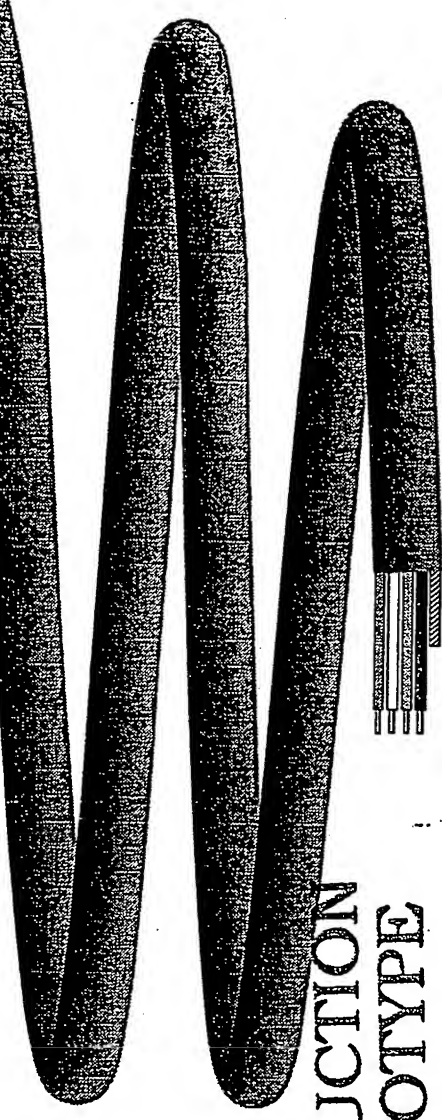
REVISION : C	NAME : EOLSON
REV. DATE : 06/11/99	DATE : 04/14/98
SHEET : 1 of 2	TITLE : LOADCELL PLACEMENT
ASSY DRAWING	Dwg # : D-3412-0002



SOLDER THE 4 CONDUCTOR  
WIRE TO THE LOAD CELL  
USING THE COLOR CODE GIVEN.



DETAIL:  
CABLE CONNECTIONS



PRODUCTION  
PROTOTYPE

RECORD OF REVISIONS		
DATE	DESCRIPTION	REV
04/14/99	RE-ROUTE CABLE ASSY	A
05/05/98	CHANGE CABLE ASSY, REMOVE HEATSHRINK	B
06/11/99	REDESIGN OF UPPER PLATE	C

TOTAL CABLE LENGTH :  
63.25 INCHES



CONTROL PRODUCTS INC.  
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REVISION : C	NAME : EOLSON
REV. DATE : 06/11/99	DATE : 04/14/98
SHEET : 2 of 2	TITLE : LOADCELL ASSY
ASSY DRAWING	Dwg # : D-3412-0002

A

C

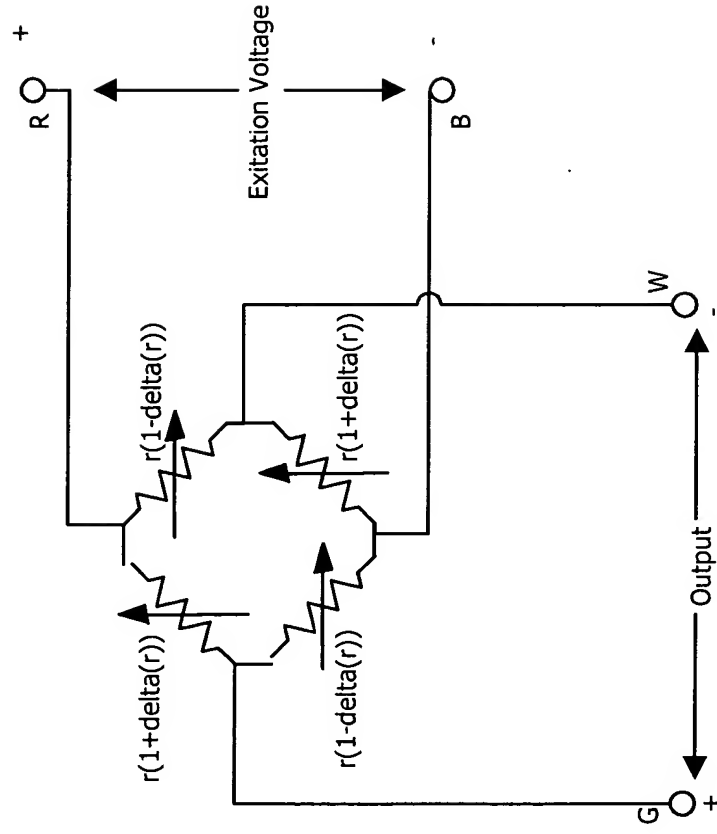
B

D



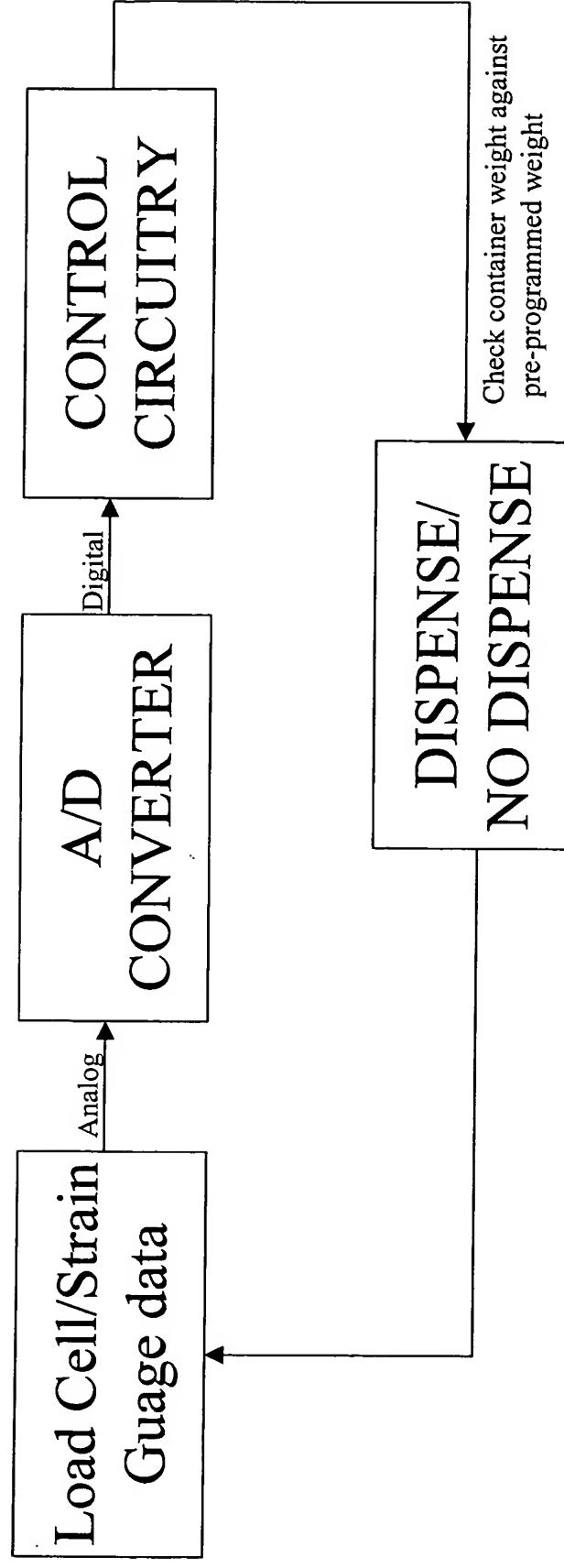
# FIGURE 7a

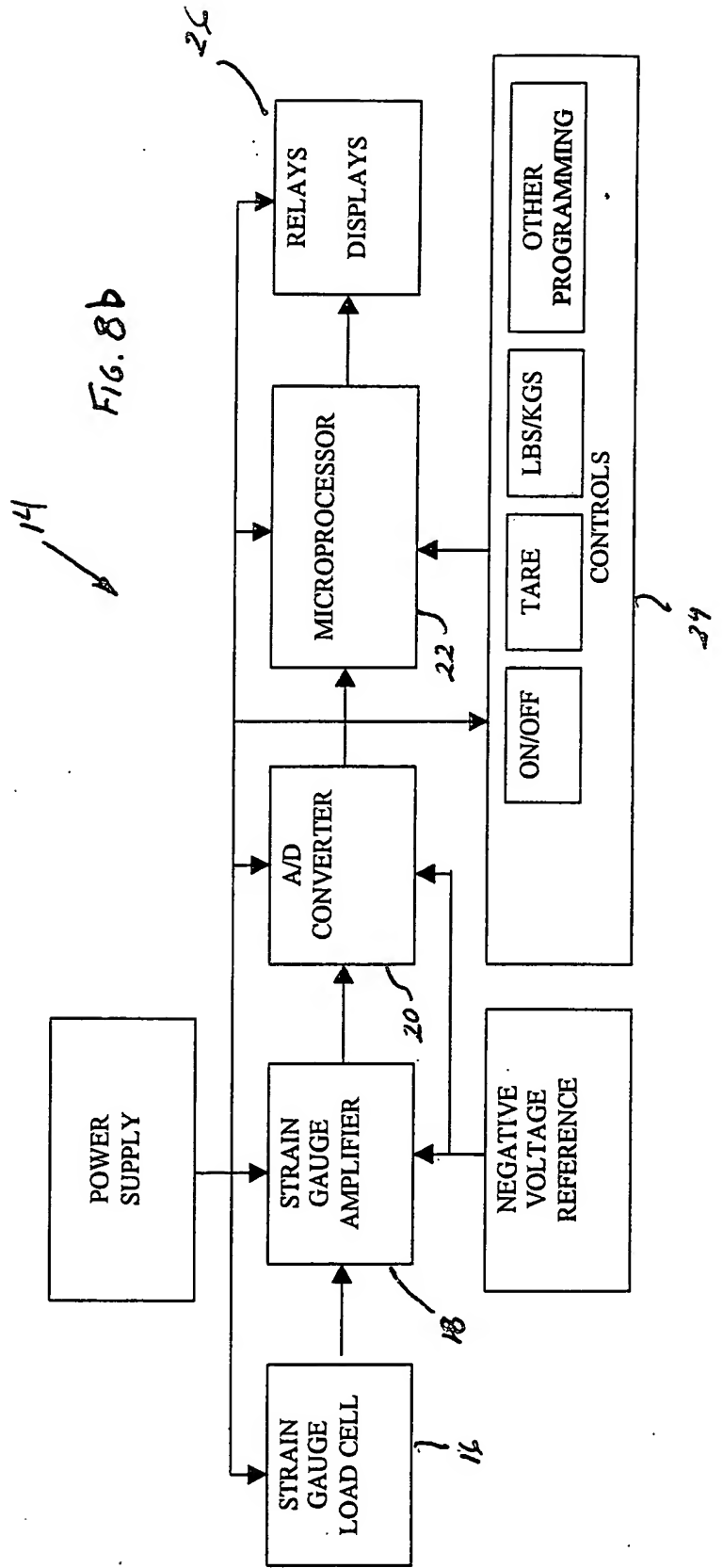
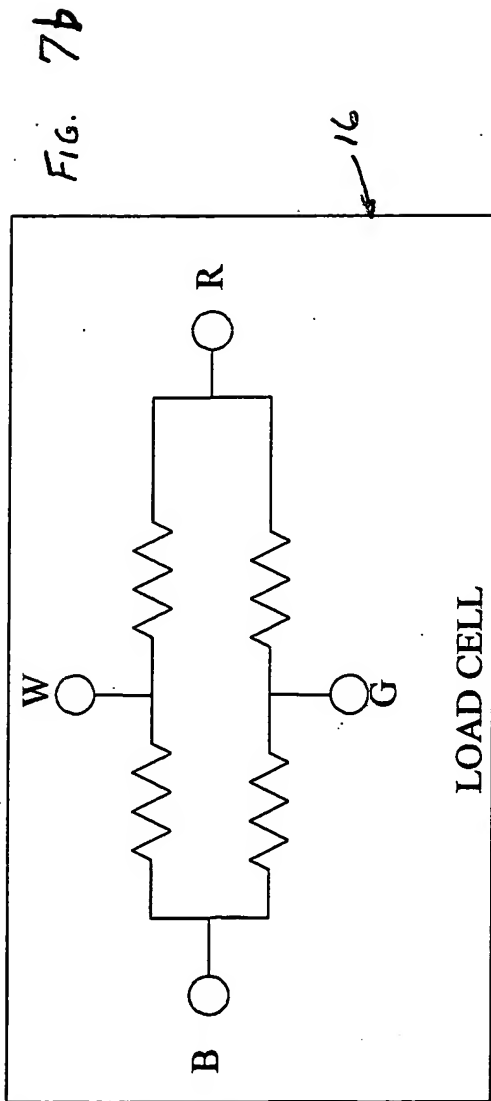
Electrical schematic view of the full bridge resistive load cell.



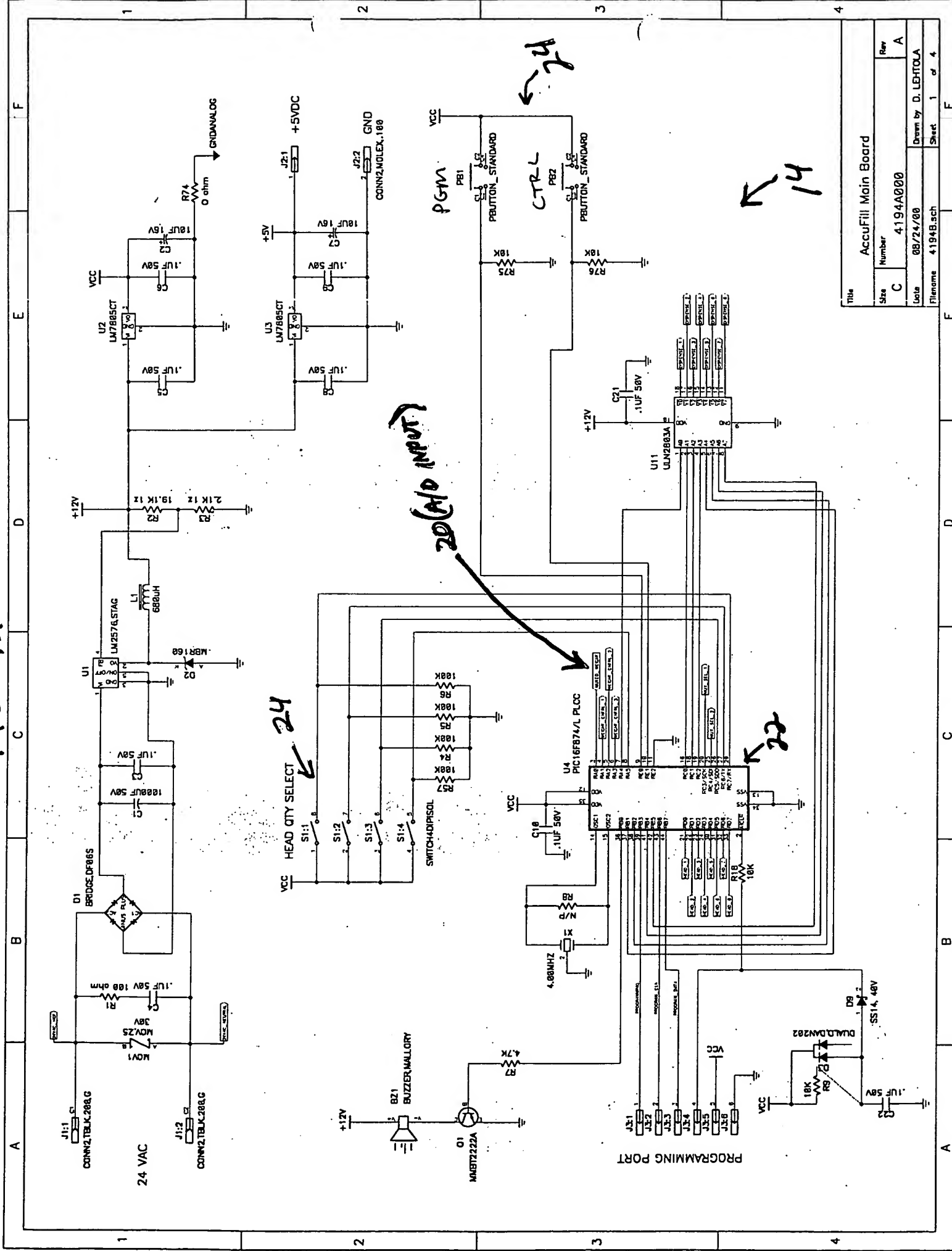
# FIGURE 8<sub>a</sub>

Control Circuitry block diagram.

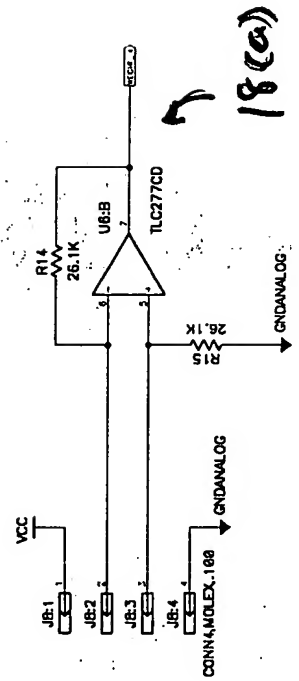
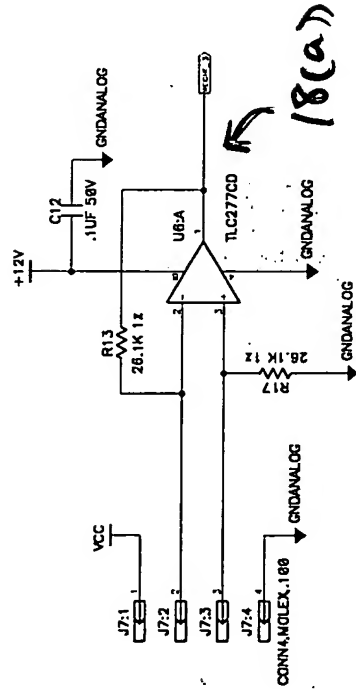
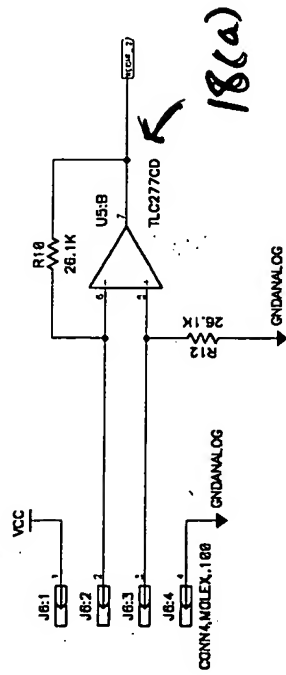
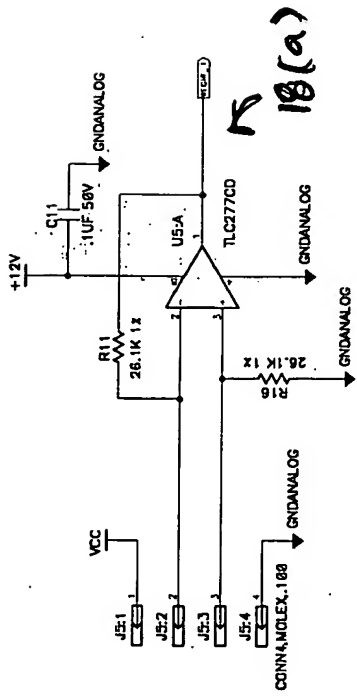




FILE 7A



Title			
AccuFill Main Board			
Size	Number	Rev	
C	4194A000	A	
Date			
08/24/00			
Drawn by			
D. LEHTOLA			
Filename	4194B.sch	Sheet	1 of 4



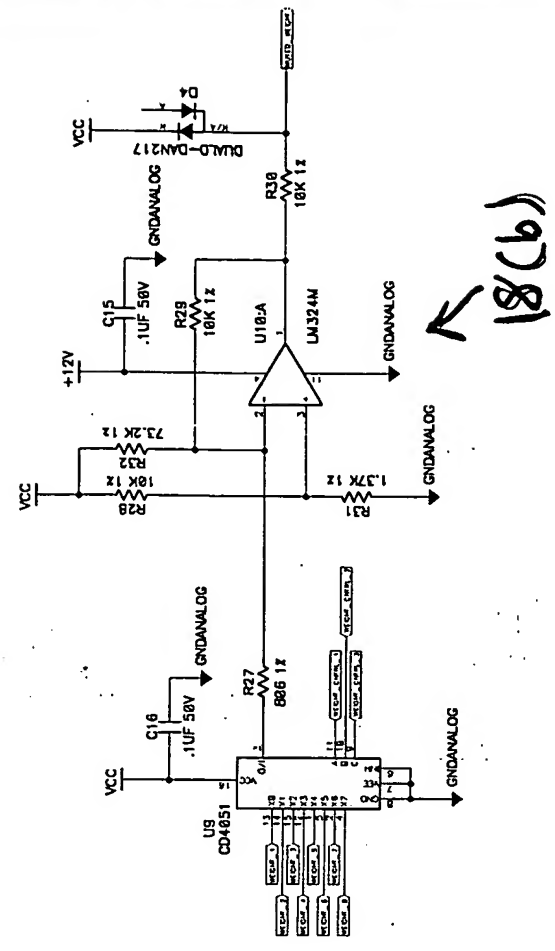
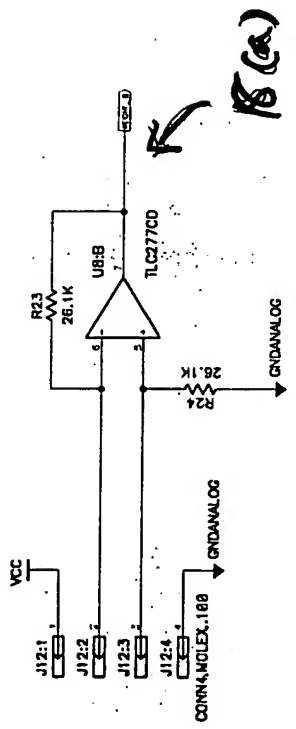
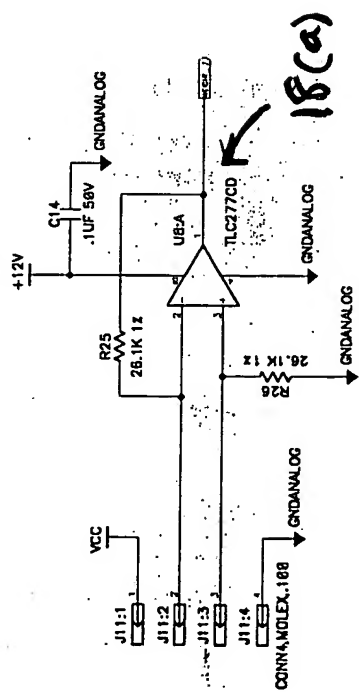
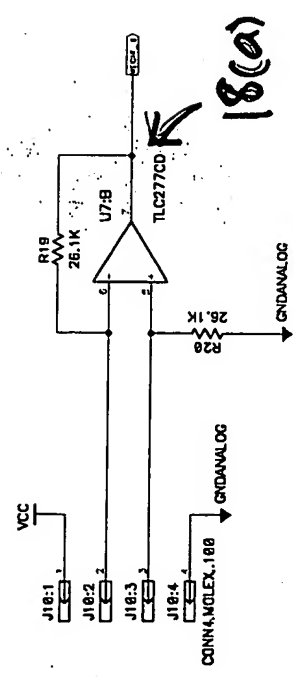
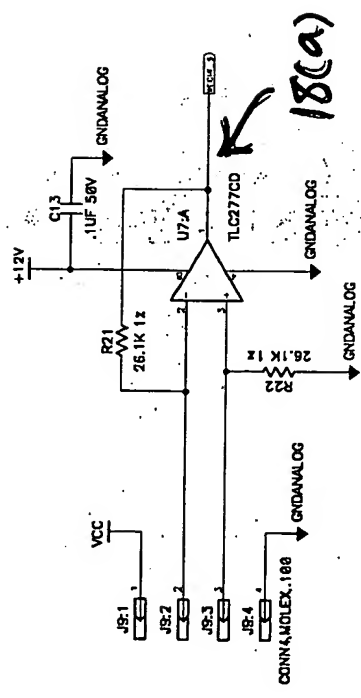
Spare Gate Table		
Last Used	Not Used	Spare Gates
BZ1		
C22		
D18	D5, D6, D7, D8, D10	
J36	J4	
K8		
L1		
M0V1		
P82		
Q1		
R78		
S1		
U15		
X1		

Ref Des	Device(Type)	Package	VCC	GND	+5V/GND+12V
U1	LM2576-5TAC	TO-220,5PIN	5,3		
U2	LM7805CT	TO-220(UP)	3	2	1
U3	LM7805CT	TO-220(UP)	2	3	1
U4	PIC16F874/L PLCC	PLCC44	35,12,34,13,11		
U5	TLC277CD	S08			4, 8
U6	TLC277CD	S08			4, 8
U7	TLC277CD	S08			4, 8
U8	TLC277CD	S08			4, 8
U9	CD4051	S016	16		8,7,8
U10	LM324M	S014			11, 4
U11	ULN2803A	DIP18	9		10
U12	4852	S016	16	8,8,7	
U13	4852	S016	16	8,8,7	
U14	4852	S016	16	8,8,7	
U15	4852	S016	16	8,8,7	

14

Title				
AccuFill Main Board				
Size	Number	Rev		
C	4194A000	A		
Date	08/24/08	Drawn by	D. LEHTOLA	
Filename	4194B.sch	Sheet	2	of 4

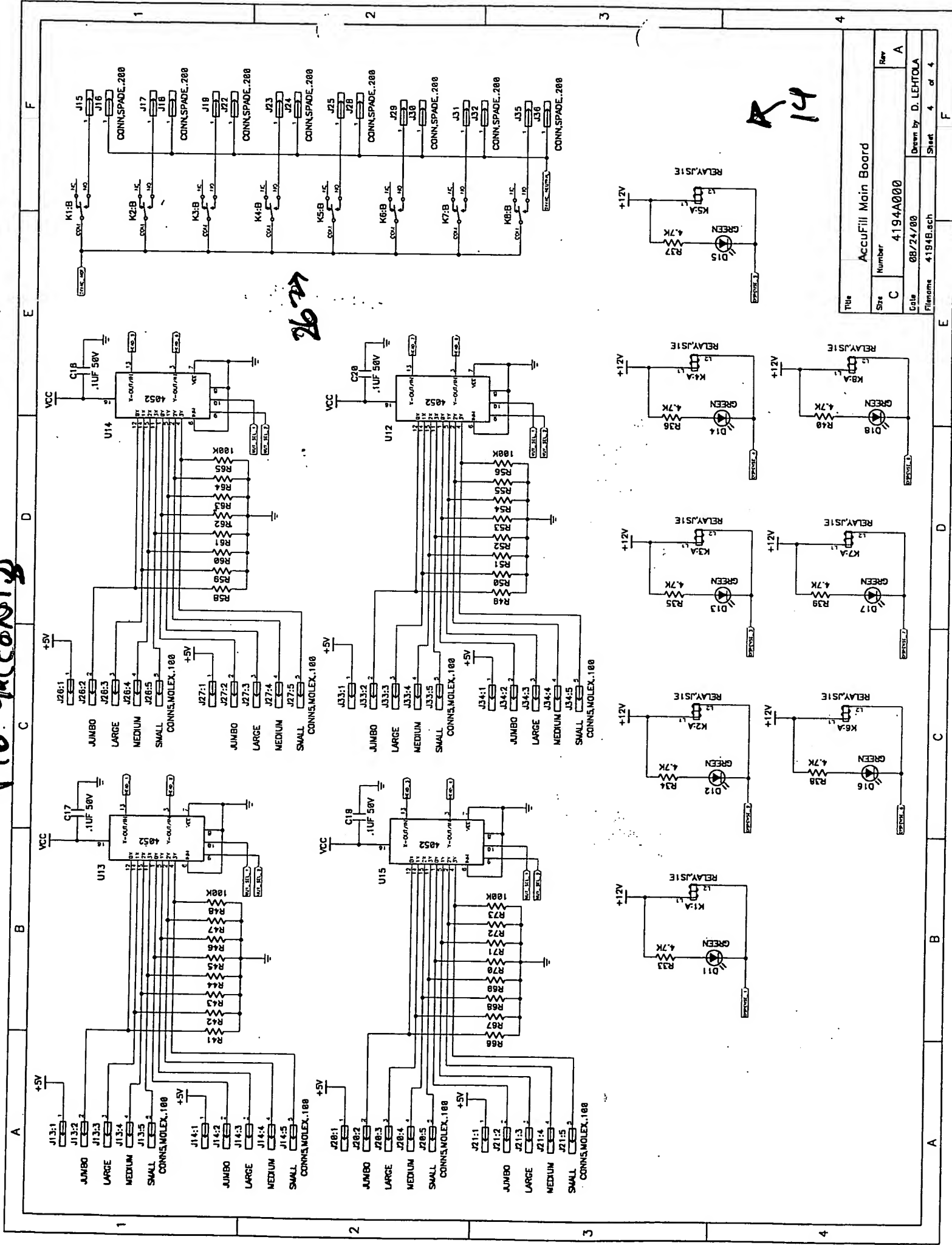
FIG. 7A (CONT.2)



14

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Date	08/24/00	Drawn by	D. LEHTOLA	Sheet	3	of	4
Filename	4194B.sch						

FIG. 9a (CONT.)



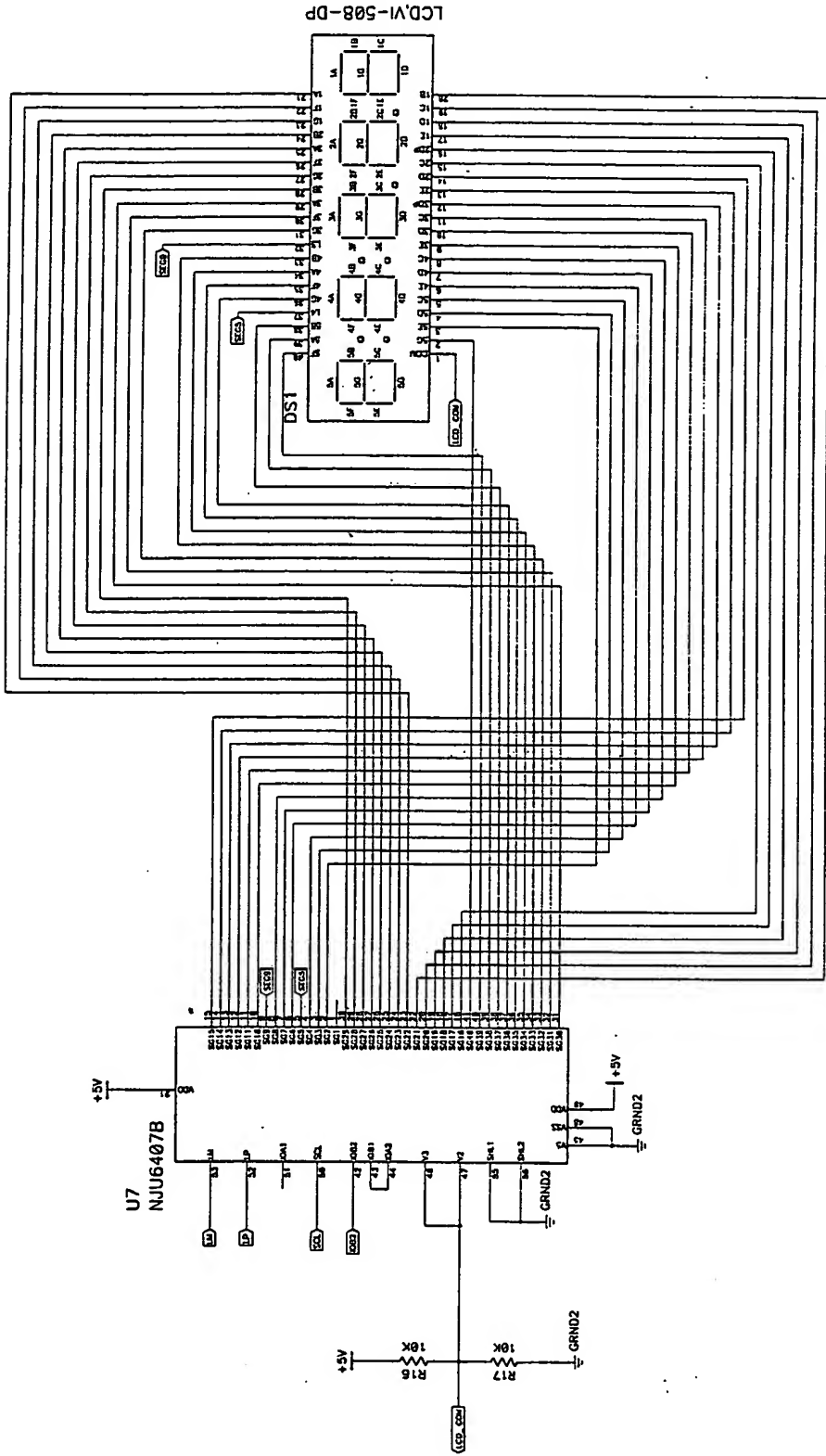
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Size	C	Number	4194A000		Rev	A
Date	08/24/00					
Filename	4194B.sch					
Sheet	4		of		4	





Display

Fig. 1b



PLATFORM SCALE			
Title	Size	Number	Rev
	C	3451B000	B
Date	8/15/88	Drawn by	D. LENTOLA
Filename	3451b.csh	Sheet	2 of 2